

TECHNICAL SPECIFICATIONS

DESCRIPTION:

The BioMatrix AlphaTM Drug Eluting Coronary Stent System (BioMatrix AlphaTM DES) is a drug eluting stent (DES) system for coronary use with a drug releasing biodegradable polymer coating. This DES is a combination product comprising two key components: 1. a cobalt chromium stent platform with six and nine crown designs for small vessel (SV) 2.25-3.00 mm and medium vessel (MV) 3.50-4.0 mm diameters, which includes the active BA9TM pharmaceutical ingredient (Biolimus A9TM) incorporated into a PLA polymer coating, and 2. the delivery system.

COMPONENT DESCRIPTION:

- A balloon expandable intra-coronary cobalt chromium stent with a drug eluting coating, pre-mounted onto a semi-compliant rapid exchange balloon delivery system.
- A delivery system that has two radiopaque markers, which fluoroscopically mark the ends of the stent to facilitate proper placement.
- A female Luer lock connector hub located at the proximal end of the delivery system. This hub connects to the balloon inflation lumen. The guidewire used in the procedure enters the distal tip of the catheter and exits 27.5 cm proximal to the tip of the delivery system.

COATING COMPONENT DESCRIPTION:

- BA9 drug (USAN/INN: umirolimus) is a semi-synthetic sirolimus derivative with increased lipophilicity.
- BA9 drug on the BioMatrix Alpha DES inhibits smooth muscle cell proliferation within the stent proximity.
- Poly lactic acid (PLA) acts as a carrier for the drug and biodegrades as the drug is eluted from coating.

stentas padengtas biodegraduojan iu (per 90 dien ištirpstan iu) poli - l - pieno r gšties arba lygiaver iu polimeru ir -limus klas s vaistu, turin iu antiproliferacin poveik ir mažinant restenozi skai i ;

INDICATIONS:

The BioMatrix Alpha stent is indicated for improving coronary luminal diameter for the treatment of *de novo* lesions in native coronary arteries with a reference diameter ranging between 2.25 mm and 4.0 mm. Stents with lengths of 33 and 36 mm are only available for artery diameters ranging between 2.5 mm and 3.5 mm.

STENT DELIVERY SYSTEM:

| | |
|--------------------------------|--|
| Catheter design | Rapid exchange |
| Usable shaft length | 142 cm ± 3 cm |
| Proximal shaft design | Hypotube |
| Proximal shaft coating | PTFE |
| Proximal shaft profile | 2.0 F / 0.0265" / 0.67 mm |
| Shaft markers placement | 90 cm ± 2 cm and 100 cm ± 2 cm from tip |
| Distal shaft profile | 2.6 F / 0.034" / 0.86 mm |
| Lesion entry profile | 0.016" |
| Balloon material | Polyamide elastomers (Pebax) 72D |
| Balloon compliance | Semi-compliant |
| Balloon folding | Tri-fold |
| Balloon cone | 30 degrees |
| Radiopaque markers | 2 swaged platinum / iridium marker bands |
| Length of balloon markers | 0.5 / 0.9 mm (distal / proximal) |
| Nominal pressure | 8 atm / 811 kPa for all models |
| Rated Burst Pressure | 16 atm / 1621 kPa (2.25-3.00 mm) 14 atm / 1418 kPa (3.50-4.00 mm) |
| Guiding catheter compatibility | 5 F |
| Guide wire compatibility | 0.014" / 0.36 mm |
| Hydrophilic coating | W-I coating - covers the catheter shaft and tip, with the exception of the balloon itself (up to 50 cm to proximal shaft from tip) |
| Hub | Luer taper and thread must meet ISO 594-1 gauging test |

vedimo sistemos naudojamas ilgis - ne mažesnis kaip 140 cm.

balion lis, ant kurio užmautas stentas, yra iš dalies kintamo diametro (semi-compliant - angl.);

išbandytasis plyšimo sl gis (RBP - angl.) - ne mažesnis nei 16 atm;

STENT PLATFORM:

| | |
|--------------------------------------|--|
| Stent material | CoCr per ASTM F562 |
| Stent platform | Chroma TM |
| Strut design | Corrugated rings |
| Link design | "S" connectors and straight connectors |
| Strut thickness | MV - 9 crowns: 88 µm SV - 6 crowns: 84 µm |
| Stent crowns | MV - 9 crowns: 3.50-4.00 mm SV - 6 crowns: 2.25-3.0 mm |
| Stent crossing profile | 0.041" |
| Flexibility | Very good |
| Radiopacity | Good |
| Ferromagnetism | Non-ferromagnetic (MRI safe) |
| Open cell diameter SV model (3.0 mm) | 1.58 mm* |
| Foreshortening/Elongation | 2.29%* |
| Elastic recoil | 3.87%* |
| Radial strength | > 0.67 bar / 500 mm Hg |

galimyb rinktis kobalto ir chromo lydinio arba 316L plieno (didesn s radialin s j gos) modelius arba jiems lygiaver ius - "plienas - kitas buketas"

stento sienel s storis - iki 0.0047" (0,12 mm); " ia yra 0,088 ir 0,084 mm"

CELL OPENING:

| | 6-crown stent | 9-crown stent |
|--|---|---|
| Stent over expansion outer diameter ² | 4.76 mm (stent post-dilated with 5.0 mm balloon) | 5.95 mm (stent post-dilated with 6.0 mm balloon) |
| Maximum cell opening ² | 2.08 mm (stent post-dilated with 5.0 mm balloon) | 2.34 mm (stent post-dilated with 6.0 mm balloon) |
| Cell over-expansion perimeter ³ | 11.79 mm (stent post-dilated with 3.5 mm balloon) | 15.26 mm (stent post-dilated with 4.0 mm balloon) |
| Cell over-expansion diameter ³ | 2.70 mm (stent post-dilated with 3.5 mm balloon) | 3.46 mm (stent post-dilated with 4.0 mm balloon) |

* Biosensors International internal bench testing performed on 3.0x19 mm stents. Data on file at Biosensors International.

1. BioMatrix AlphaTM stent 3.0x19 mm, N=3 - 2. BioMatrix AlphaTM stent 3.0x19 mm, N=1, BioMatrix AlphaTM stent 4.0x19 mm, N=1
3. ChromaTM stent 3.0 mm, N=1, ChromaTM stent 3.5 mm, N=1 - All balloon used for cell over-expansion were deployed at NP

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COMPLIANCE TABLE:

| Inflation Pressure (ATM) | For stent lengths 9 to 29 mm | | | | | |
|--------------------------|------------------------------|------|------|------|------|------|
| | 2.25 | 2.50 | 2.75 | 3.00 | 3.50 | 4.00 |
| 8 Nominal | 2.25 | 2.50 | 2.75 | 3.00 | 3.50 | 4.00 |
| 9 | 2.28 | 2.54 | 2.79 | 3.05 | 3.56 | 4.07 |
| 10 | 2.31 | 2.58 | 2.83 | 3.10 | 3.62 | 4.14 |
| 11 | 2.34 | 2.62 | 2.87 | 3.15 | 3.68 | 4.21 |
| 12 | 2.37 | 2.66 | 2.91 | 3.20 | 3.74 | 4.28 |
| 13 | 2.40 | 2.70 | 2.95 | 3.25 | 3.80 | 4.35 |
| 14 RBP | 2.43 | 2.74 | 2.99 | 3.30 | 3.86 | 4.42 |
| 15 | 2.46 | 2.78 | 3.03 | 3.35 | | |
| 16 RBP | 2.49 | 2.82 | 3.07 | 3.40 | | |

| Inflation Pressure (ATM) | For stent lengths 33 and 36 mm | | | |
|--------------------------|--------------------------------|------|------|------|
| | 2.50 | 2.75 | 3.00 | 3.50 |
| 8 Nominal | 2.50 | 2.75 | 3.00 | 3.50 |
| 9 | 2.56 | 2.83 | 3.08 | 3.59 |
| 10 | 2.62 | 2.91 | 3.16 | 3.67 |
| 11 | 2.68 | 2.98 | 3.23 | 3.75 |
| 12 | 2.74 | 3.04 | 3.29 | 3.83 |
| 13 | 2.80 | 3.09 | 3.35 | 3.91 |
| 14 RBP | 2.85 | 3.14 | 3.40 | 3.98 |
| 15 | 2.90 | 3.19 | 3.45 | |
| 16 RBP | 2.95 | 3.24 | 3.50 | |

stent ilgis - nuo 8 ± 1 mm iki 48 ± 1 mm, diametras - nuo 2,25 ± 0,25 mm iki 4,00 ± 0,25 mm;

| Lengths (mm) | Stent diameter | | | | | |
|--------------|----------------|-----------|-----------|-----------|-----------|-----------|
| | Ø 2.25 mm | Ø 2.50 mm | Ø 2.75 mm | Ø 3.00 mm | Ø 3.50 mm | Ø 4.00 mm |
| 9 | BMX6-2209 | BMX6-2509 | BMX6-2709 | BMX6-3009 | BMX6-3509 | BMX6-4009 |
| 14 | BMX6-2214 | BMX6-2514 | BMX6-2714 | BMX6-3014 | BMX6-3514 | BMX6-4014 |
| 19 | BMX6-2219 | BMX6-2519 | BMX6-2719 | BMX6-3019 | BMX6-3519 | BMX6-4019 |
| 24 | BMX6-2224 | BMX6-2524 | BMX6-2724 | BMX6-3024 | BMX6-3524 | BMX6-4024 |
| 29 | BMX6-2229 | BMX6-2529 | BMX6-2729 | BMX6-3029 | BMX6-3529 | BMX6-4029 |
| 33 | | BMX6-2533 | BMX6-2733 | BMX6-3033 | BMX6-3533 | |
| 36 | | BMX6-2536 | BMX6-2736 | BMX6-3036 | BMX6-3536 | |

42 ir 48 mm - kitas bukletas

Class III device, Rule 8, 13; MDD 93/ 42/ EC

The product is latex and PVC free

Single Use Product

Sterile unless package is opened or damaged

Do not reuse or resterilize

Sterilization method: E-Beam

CE certification: 0050

Shelf life: 24 months

Storage Conditions:

Store in a cool, dark, dry place. Do not store above 30°C.

For further information or assistance, please contact:



Legal Manufacturer - Sales and Customer Service:

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